

Product Name: CCL19 (MIP-3 β)

Catalog Numbers: CCL19-5ug CCL19-20ug CCL19-50ug CCL19-100ug CCL19-1mg

DESCRIPTION

Source	E. coli derived Accession # Q99731 (22-98)
Modification	None
Actual Molecular Mass (Mass Spec)	Mol weight confirmed by mass spec
Predicted Molecular Mass	8.800 kDa
Extinction Coefficient	8730 M ⁻¹ cm ⁻¹
Protein Sequence	GTNDAEDCCLSVTQKPIPGYIVRNFHYLLIKDGCVRPAVVFTTLRGRQLCAPPDQPWVERII QRLQRRTSAKMKRRSS

SPECIFICATIONS

Activity	EC50 = 7.0 nM determined by Migration Assay with recombinant human CCR7
Endotoxin Level	<0.01 EU per 1 μ g of the protein by the LAL method
Purity	> 97% by SDS PAGE
Formulations	Lyophilized
Carrier Protein	None

PREPARATION AND STORAGE

Reconstitution	Spin tube prior to resuspending. Recommended at 100 μ g/mL in sterile water
Shipping	Room Temp

Stability and Storage**Avoid repeated freeze-thaw cycles**

- 12 months from date of receipt, -20 to -70 °C as supplied.
- Suggest to use immediately after reconstitution
- 1 month at -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND**Description**

Macrophage inflammatory protein-3-beta (MIP3 β) (CCL19), also known as EBI1 ligand chemokine (ELC), directs chemotaxis of dendritic cells, and certain B- and T- lymphocytes, but not monocytes or granulocytes. It is constitutively expressed in thymus and lymph nodes and binds specifically to target cells expressing the receptor CCR7. Being a homeostatic chemokine, its primary physiological role is considered to be in the normal recirculation and homing of lymphocyte. However, MIP3 β could also be proinflammatory, and is implicated in the post-HIV infection responses.

References:

1. "Molecular Cloning of a Novel Human CC Chemokine EBI1-ligand Chemokine That Is a Specific Functional Ligand for EBI1, CCR7" Yoshida R., Imai T., Hieshima K., Kusuda J., Baba M., Kitaura M., Nishimura M., Kakizaki M., Nomiyama H., Yoshie O. J Biol Chem 272:13803-13809 (1997)
2. "CK beta-11/macrophage inflammatory protein-3 beta/EBI1-ligand chemokine is an efficacious chemoattractant for T and B cells." Kim C.H., Pelus L.M., White J.R., Applebaum E., Johanson K., Broxmeyer H.E. J. Immunol. 160:2418-2424(1998)
3. "Homeostatic chemokines CCL19 and CCL21 promote inflammation in human immunodeficiency virus-infected patients with ongoing viral replication." Damås J.K., Landrø L., Fevang B., Heggelund L., Tjønnfjord G.E., Fløisand Y., Halvorsen B., Frøland S.S., Aukrust P. Clin Exp Immunol. 157:400-7 (2009)